1. Product and Company Identification

Product Code: 2724-797-270APD
Product Name: ADAMS PLUS FLEA & TICK SPRAY FOR DOGS & CATS

Manufacturer Information

Company Name: Distributed by:
Farnam Companies, Inc.
301 West Osborn Road
Phoenix, AZ

Emergency Contact: Animal or human exposure (800)234-2269
Alternate Emergency Contact: CHEMTREC (Emergency spills) (800)424-9300
Information: Farnam Companies (800)234-2269

Preparer Name: SFAith/Regulatory
Revision Date: 08/21/2012

Additional Identity Information

100511009 16-oz
100511010 32-oz

2. Composition/Information on Ingredients

Hazardous Components (Chemical Name) | CAS # | Concentration | OSHA PEL | ACGIH TLV
--- | --- | --- | --- | ---
1. Etofenprox | 80844-07-1 | 0.5 % | | |
2. 2,4-Dodecadienoic acid, 11-methoxy-3,7,11-trimethyl-, 1-methylethyl ester, [S-(E,E)]- | 65733-16-6 | 0.27 % | | |
3. Piperonyl butoxide | 51-03-6 | 1.75 % | | |

3. Hazards Identification

Emergency Overview
KEEP OUT OF REACH OF CHILDREN
HAZARDS TO HUMANS AND DOMESTIC ANIMALS – CAUTION: CAUSES MODERATE EYE IRRITATION. AVOID CONTACT WITH EYES OR CLOTHING. WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING AND BEFORE EATING, DRINKING, CHEWING GUM, USING TOBACCO, OR USING THE TOILET. REPEATED EXPOSURE TO ETOFENPROX CAN CAUSE SKIN IRRITATION.

Route(s) of Entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion?

Potential Health Effects (Acute and Chronic)

Recommended Exposure Limits
Solvent (trade secret) = 100ppm (ACGIH TLV)

Signs and Symptoms Of Exposure
Slight skin irritant.
Slight eye irritant.

Medical Conditions Generally Aggravated By Exposure

4. First Aid Measures

Emergency and First Aid Procedures
IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.
ADAMS PLUS FLEA & TICK SPRAY FOR DOGS & CATS

MATERIAL SAFETY DATA SHEET

IF ON SKIN OR CLOTHING: If you suspect a reaction to this product. Discontinue use. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

5. Fire Fighting Measures

Flammability Classification: Combustible Liquid

Flash Pt: 41.80 C

Explosive Limits: LEL: 12 UEL: 3

Autoignition Pt: NA

Fire Fighting Instructions

Firefighters should wear full protective clothing including self-contained breathing apparatus.

Flammable Properties and Hazards

Hazardous Combustion Products

Incomplete combustion may produce carbon monoxide

Extinguishing Media

Dry chemical, CO2, Alcohol foam, or water spray

Unsuitable Extinguishing Media

None known

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled

Do not allow spill to enter waterways inhabited by aquatic organisms. Soak up with absorbent material and place in container for disposal.

Additional Accidental Spill Information

Absorbents: Clay granules, sawdust, dirt or equivalent.

7. Handling and Storage

Precautions To Be Taken in Handling

Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

Precautions To Be Taken in Storing

Do not store near heat or open flame. Store away from children and animals.

8. Exposure Controls/Personal Protection

Respiratory Equipment (Specify Type)

May be necessary

Eye Protection

See below

Protective Gloves

See below

Other Protective Clothing

Engineering Controls (Ventilation etc.)

Use with adequate ventilation.

Work/Hygienic/Maintenance Practices

Wash hands before eating, drinking, smoking, or using restroom.

Additional Exposure Control Information

Use appropriate protective equipment to prevent contact with eyes, clothing and skin, including chemical resistant gloves and protective eyewear. If ventilation is inadequate to control airborne vapor concentrations below recommended exposure limits, respiratory protection may be necessary. End users of this product should consult product labeling for personal protective equipment recommendations.
ADAMS PLUS FLEA & TICK SPRAY FOR DOGS & CATS

MATERIAL SAFETY DATA SHEET

9. Physical and Chemical Properties

Physical States: [ ] Gas [ X ] Liquid [ ] Solid
Melting Point: NA
Boiling Point: NA
Decomposition Temperature: NA
Autoignition Pt: NA
Flash Pt: 41.80 °C
Explosive Limits: LEL: 12 UEL: 3
Specific Gravity (Water = 1): NA
Density: 0.9544 g/ML at 20.0 °C
Bulk density: NA
Vapor Pressure (vs. Air or mm Hg): NA
Vapor Density (vs. Air = 1): NA
Evaporation Rate: NA
Solubility in Water:
Solubility Notes
 Miscible with water
Percent Volatile: N.A.
Viscosity: NA
Heat Value: NA
Particle Size: NA
Corrosion Rate: NA
pH: 6.38

Appearance and Odor
 Clear liquid

10. Stability and Reactivity

Stability: Unstable [ ] Stable [ X ]
Conditions To Avoid - Instability
Incompatibility - Materials To Avoid
 Strong oxidizers
Hazardous Decomposition Or Byproducts
Hazardous Polymerization: Will occur [ ] Will not occur [ X ]
Conditions To Avoid - Hazardous Polymerization

11. Toxicological Information

Toxicological Information
ACUTE TOXICITY
Acute oral toxicity: LD50 >5,000 mg/kg
Acute dermal toxicity: LD50 >5,000 mg/kg
Skin irritation: Slightly irritating
Eye irritation: Moderately irritating
Not a dermal sensitizer
Chronic Toxicological Effects

CHRONIC TOXICITY [Specific to Active Ingredient(s)]
Methoprene is not considered a carcinogen. The NOEL for non-carcinogenic effects in an 18 month mouse study was 250 ppm.
Etofenprox is not listed as a carcinogen by NTP or IARC and is not regulated by OSHA.
In rats the target organs are the liver and thyroid. The NOAEL for chronic toxicity is 3.7 mg/kg/day for male rats. The target organ in mice is the kidney. The NOAEL is 3.1 mg/kg/day for mice.
Piperonyl butoxide: An increase in the number of benign liver tumors in mice fed piperonyl butoxide technical at doses which far exceeded any anticipated daily human intake. Independent and industry toxicology experts have reviewed the data and agree that the findings of the study do not indicate a health risk to humans.

Carcinogenicity/Other Information

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Additional Toxicological Information

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]
Methoprene is not a teratogen. The NOEL for maternal and embryo toxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 2500 ppm.
Etofenprox is not a teratogen. It is does not have adverse effects on reproduction.
Piperonyl butoxide: There were no birth defects or adverse effects on reproductive parameters in tests with rats or rabbits. It is not considered to be teratogenic.

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12. Ecological Information

General Ecological Information

ECOTOXICITY [Active Ingredients Only]
Methoprene
Acute Toxicity:
Fish: LC50 (trout): 760 ppb, (bluegill): > 370 ppb ((S)-Methoprene);
Aquatic invertebrates: LC50 (Daphnia): 360 ppb ((S)-Methoprene)
Etofenprox
Acute Toxicity:
Rainbow trout: LC50 = 3.3 ppb
Bluegill: LC50 = 8.5 ppb
Piperonyl butoxide
Acute Toxicity:
Rainbow trout: LC50 = 6.12 ppm
Bluegill: LC50 = 8.5 ppb 5.37 ppm
Sheepshead minnow: LC50 = 3.94 ppm
Mysid shrimp: LC50 = 0.32 ppm
13. Disposal Considerations

Waste Disposal Method

Wastes resulting from use of this product should be disposed of in accordance with all federal, state and local requirements. For additional regulatory information, see section 15 of this document.

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name

NOT REGULATED VIA HIGHWAY OR RAIL
Consumer Commodity ORM-D-AIR Air transport within U.S.
Freight Classification: Insecticides Spray

Additional Transport Information

15. Regulatory Information

No data available.

16. Other Information

Company Policy or Disclaimer

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification.